Saguaro National Park Resource Management Division



Youth Intern Program for Natural Resources and Climate Change

Introduction

During the summer of 2010, Saguaro National Park hosted a Youth Intern Program (YIP) crew to monitor the potential impacts of climate change on

park's natural resources. Eight students (and two teachers) spent the hot summer in the field - measuring, surveying, and mapping the park's namesake cactus, the invasive grass buffelgrass that threatens it, and sediment in the park's precious stream pools. Along the way they experienced the full range Field data collection of Saguaro National Park, from



the scorching desert heat to the cool spruce and fir forests high in the Rincon Mountains.

Overview of the Program

The program was funded by the Department of

the Interior 21st Century Youth Conservation Corps initiative, which seeks to energize vouth involvement on public lands and engage, educate, and develop the next generation of National Park leaders, Saguaro's crew was a diverse group of local students of mixed ages, ranging from recent high school seniors to college graduate students. The program was more than a job in that it in-



Collecting GIS data

cluded training and mentoring. Students learned

CPR, Wilderness First Aid, and field safety, the mission and organization of the NPS, mapping skills using GIS and GPS, and interpretive techniques, leadership skills, climate change, hiking and camping, and cultural resources. In addition, each student spent some time each week away from the field, working on projects with other experienced park staff. These projects focused on computer mapping, interpretive writing, development of databases and reports, mule packing, and a variety of other areas.

Accomplishments

In the field, the YIP crew worked very hard, under adverse conditions that included extreme heat and long days. They hiked to remote locations to measure and map saguaros, helping develop the first-ever map of saguaro distribution in the park. They walked transects with GPS units searching for and mapping buffelgrass, an invasive African grass that car-

ries severe fires in an ecosystem where many plants (including saguaros) cannot tolerate fire. The distribution of both plants is believed to be changing in the park due to steadily warming winter temperatures in the desert Southwest.

Fortunately, the summer was broken up by a week-long trip to Manning Cabin, nestled high in the mountains at over

8000 in feet elevation. At Manning and in lower elevation streams, the crew's work included



Total station measurements

surveying the depth of sediments in tinajas, the precious spring-fed stream pools that are so essential to wildlife in the arid Southwest. In addition, they matched historic photographs and mapped vegetation to investigate long-term changes in the park's plant communities.

Seven of the eight students have continued to work part-time for the Park Service following the

summer field season. The YIP program has been a great success for Saguaro National Park. It has brought new energy and diversity to our park and allowed us to accomplish a large amount of important work that we would not otherwise have been able to do. The resource division feels very grateful for this opportunity and we hope to be able to continue and expand it in the future.



YIP Crew at Manning Camp